"Mr. Stefansson has greatly magnified the difficulty of making stone pots and lamps, naturally enough, for he never saw their manufacture. He says, 'To make a large pot (inside measure say 9 by 40 inches and 7 inches deep) is said to take all a man's spare time for a year, and some take two years to the making of a pot. Lamps are more quickly made. Certain individuals are considered expert pot-makers, and many others attain old age without ever having made a large pot, though all have owned one or more. We have here the beginning of division of labour, the germ of a "trade." These pot and lamp makers furnish the best example known to me both of specialization of industries by tribes and of the division of labour among individuals.'" (2)

Two members of the staff of our expedition, Mr. J.R. Cox and Mr. J.J. O'Neill, watched the manufacture of a lamp about 3 feet long at Port Epworth in July, 1915. The workman, who was only a young man of about twenty-five years, hewed his block out of the solid rock in a single day. Two days later his lamp was finished, though he worked only at odd intervals. At the same time the children were amusing themselves by making small lamps and pots from two to eight inches long. Working steadily, even an

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"2. Geol. Survey Canada, Museum Bulletin, No. 6, 1914, p. 28."

unskilled native could make the largest lamp in use in three days, and a pot would take him very little longer. A Dolphin and Union strait woman wandered east with her [54] husband one spring, spent the summer around Tree river, and returned to her own land the following winter with a large lamp and a pot that they had made. This was in fact the object of their journey, although neither of them had ever seen a lamp or a pot manufactured before. The majority of the natives of Coronation gulf do the same thing at some time or other in their lives, for fresh soapstone (talc chlorite schist) such as is found at Tree river requires no great skill in handling, and can be adzed quite easily even with so soft a metal as copper. It is only natural that the local natives should often make extra pots and lamps for trading purposes, but they by no means specialize in this industry, nor rank in any way as professional stone-cutters."

2: Stefansson--112-113 (1908-12) 1914 Copper Eskimo
116, 439, 324

"The making of a stone lamp is evidently not so difficult a task. The chief tool used nowadays is an iron adze, the iron being procured chiefly by tribe to tribe trade from Hudson Bay, although some of it is said to date back to the finding and plundering of M'Clure's ship on the north coast of Banks Island, which must have been somewhere in the '50's of the last century. When iron is not at hand it is said that tools of stone take its place. As all soapstone products are fragile and especially so the cooking pots because they are made thin, there arises continually the necessity of supplying new pots and lamps. In earlier times before the coming of the Hudson Bay trading post at Fort McPherson on the Lower Mackenzie broke up the chain of continuity of the coastal trade between Coronation Gulf and Bering [113] Strait, it is probable that the making of stone lamps and pots was an industry of far greater proportions than it is today. For, as elsewhere pointed out, it seems clear that this community and ones east of it supplied all the steatite cooking gear used to the west as far as Siberia."

11: Stefansson--249 (1908-1912) 1913 Copper Eskimo
116, 324, 439

"At Cape Bexley the previous spring we had noted the abundance and excellence of the stone lamps and pots and had asked the people where they got them. Their answer had been that sometimes they purchased them from people to the east, and sometimes individuals of their own tribe went east to the place where suitable stone could be found and made their own pots and lamps. This place they had named to us as Utkusiksalik, or the place where there is material for pots, and the people who lived in the district they called the Utkusiksaligmiut. We now found that some of the people in this village considered themselves Utkusiksaligmiut and that the place where the pot stone was to be found was the mouth of the valley of a small river, clearly visible from this village as a V-shaped gap in the high hills in the mainland to the south. From this quarry, or from others lying between it and Back River, must have come all the lamps and pots of the peculiar stone known to the Eskimo as tunirktak, found all the way from the Coppermine west to Bering Straits; and pending further investigations we may assume that utensils of the same stone found even in eastern Siberia among the Eskimo and coast Chuckcee must have come from the same sources."

412 Two incidents that came directly under my notice in the summer of 1915
322 were fairly typical. A native with whom I was travelling in southwest Victoria Island discovered on the beach a long, nail-studded plank that had presumably fallen overboard from some vessel. He carried it several miles inland to our camp, and there spent half a day splitting it into poles for fish-spear handles, two of which he sold to a kinsman. A few days later another native found a second plank, which he proposed to convert into a sled-runner, and with this purpose in view trimmed it slightly with his hunting knife. After consulting his companions, however, he decided that a new sled-runner was not needed, so he turned the [237] plank over to his stepfather to fashion into tent-poles. In each case the native split the plank with a crude antler wedge driven home by a boulder.

322 The uses of wood were naturally manifold. From it were made the sled,
[302] the tent-poles, the frame of the kayak, the snow shovel, the table, food trays, and other articles too numerous to mention. Odd chips of wood sometimes served as fuel during the summer months, although the Eskimo preferred
824 heather or willow twigs. Willow twigs had a special use; sewn together in a
513 long strip they provided a mattress to protect the bedskins from the snow.

STONE

333 Stone (apart from native copper) played an astonishingly small rôle in the economy of the Copper Eskimo. Their winter home was invariably the snow-
[342] hut, although their predecessors in the region had dwelt in huts of snow or wood, whose ruins could still be traced in numerous places along the coast. Loose stone boulders held down the edges of the Copper Eskimo tents; pillars of stone (in many cases flat slabs of dolomite easily piled one on top of another) supported kayaks, sleds, and other goods that were temporarily abandoned during the summer months; and heaped-up boulders protected caches of meat or clothes from the ravages of foxes, wolves, and birds; but any real construc-
324 tion in stone was conspicuously lacking. There were no stone knives or adzes,
412 no arrow heads tipped with stone, no stone sinkers for fishing lines or nets, and no stone scrapers for use on wood or hides, although implements of all these types had been used by the earlier inhabitants and were sometimes gathered as curiosities by the Copper Eskimo themselves. There were stone hammers and whetstones, it is true, but these were merely unshaped pebbles picked up when
[415] the need arose and afterwards discarded. In short, stone provided the material
[354] for two objects only, the lamp and the cooking pot; and the stone cooking pot
[177] was discarded soon after our visit in favour of iron vessels brought in from the outside.

135

Figure 1. Lamp of native copper. IV.D.1441. 3/4.

324 These two vessels, the lamp and the cooking pot, were invariably made from
415 soapstone (talc chlorite schist), originally with copper-bladed adzes, but in our
354 time with adzes of iron. Freshly quarried soapstone readily scratches with the
316

fingernail, so that the labour of manufacturing even a large vessel was comparatively slight, never requiring more than a few days. We saw no pots made of any other material, but from Prince Albert Sound we obtained two lamps, one fashioned from a red sandstone, the other from an igneous rock, that could hardly have been hollowed out with adzes in the ordinary way, but must have been shaped by some pecking and grinding process. Their owners knew nothing about their manufacture, and there is good reason to believe that they were not made by the Copper Eskimo, but came in from Hudson Bay.[1]

As stated in the introduction, the natives considered their amygdaloidal copper,[2] which took the place of stone, bone, or ivory in so many of their implements, as merely a peculiar stone that they could work into shape, cold, by hammering with boulders and pebbles (Figure 1). Whether they were able to drill copper before they obtained iron is uncertain; if so, they must have used stone- or copper-pointed drills. In our time they still retained one or two of these copper-pointed drills, but used them, so far as we observed, only on bone, antler, and wood.

Figure 2. Lump of galena, used for marking skins. IV.D.508. 1/1.

The only important mineral besides copper was iron pyrites, which the Eskimo gathered mainly in the beds of two streams, Kugaluk River in the southwest of Victoria Island and a creek a few miles east of Coppermine River. There were other sources, however, that I failed to record. This mineral served the natives instead of flint and steel for striking fire. They possessed also a few fragments of galena (Figure 2) and litharge, which they used for marking skin and wood; the galena came mostly from Galena Point in Bathurst Inlet, but the source, or sources, of the litharge is not known.

BONE, ANTLER, HORN, IVORY

The caribou and the musk-ox supplied nearly all the bone that the Copper Eskimo required, although for shoeing the runners of their sleds they used rib bones from occasional whales that drifted up on their shores. There was hardly a bone in the two land animals that could not be turned to some purpose. Leg bones were in special demand for skin stretchers, for needle-cases, and for sheathing the wooden ends of harpoon shafts; another type of skin stretcher was fashioned from a caribou or musk-ox shoulder blade. The ribs served for handles of various kinds, for small toggles, pins, and bows for the drilling set. Other toggles were made from the breast or pelvic bones, and the astragalus provided a ready made mouthpiece for the drill.

The caribou alone provided antler, which was just as useful as bone, and interchangeable with that material for most purposes. On the other hand, ivory, which Eskimo elsewhere often substituted for bone and antler, was extremely rare, because neither the narwhal nor the walrus frequents the waters adjacent to the Copper Eskimo territory; consequently, the few ivory objects we saw among the natives almost certainly reached them by trade from the east or the west. Sheep likewise were absent, so that all the horn in use came from the musk-ox. This horn sometimes took the place of bone or antler, but it was especially prized for the manufacture of ladles, scoops, drinking horns, toggles for the sled, and hammers for pounding blubber.

Originally the Copper Eskimo used only four tools, all with copper blades, for shaping bone, antler, and horn, viz., the adze, the whittling knife, the grooving

[1] See p. 68.
[2] For the sources of this copper see Reports of the Canadian Arctic Expedition, vol. XII, pt. A, p. 39; vol. XV, pt. A, p. 39 of rep.

Lamps only 2 or 3 inches long were children's toys, often made by themselves while their parents were manufacturing larger vessels. The Copper Eskimo placed on the graves of females these minature lamps, or else genuine vessels of small size, simply because they valued their larger lamps too highly to throw them away, and believed that the dead person could enlarge a miniature to suit its needs. Frequently, perhaps generally, they recovered useful lamps that had been deposited on the graves of relatives a few years earlier. Very rarely did they make a lamp, even a miniature one, for mortuary purposes only; and when they did, it was nearly always a wooden model, because soapstone was procurable only in one or two districts.

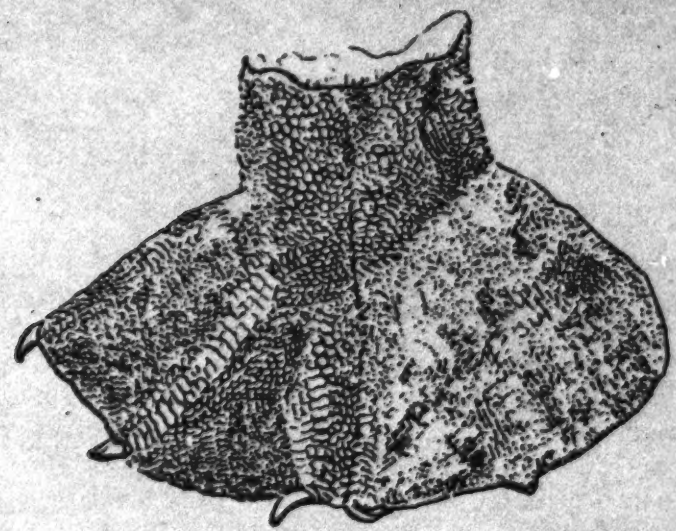

Figure 42. Bag for grass or eriophorum seeds, made from loon's feet. IV.D.234. 1/1.

Most of the cooking was done on lamps not less than 24 inches long. Lamps smaller than this, even down to 5 and 6 inches, served for short journeys, but were not intended primarily for that purpose any more than to be deposited on graves. Rather they were used to dry extra clothes, to give additional light for sewing or working, or to enable a little girl to play at housekeeping in a corner of the hut. Two small lamps laid side by side sometimes took the place of one large lamp for cooking. When these smaller specimens were made of soapstone the shapes were the same, and the workmanship as careful, as in the larger ones. Frequently, however, a family was content to use a water-worn pebble with a saucer-shaped depression, or a naturally hollow slab of limestone or dolomite.

If we exclude the makeshift lamps last mentioned there was really only one kind among the Copper Eskimo, the regular house lamp, of which the smaller specimens, when not mere toys, were generally used for light alone, the larger for both light and heat. Nearly all were made of talc chlorite schist, a soapstone that is soft, of even texture, easily worked with stone or copper tools, and not liable to crack and break under the low heat of the burning blubber.[1]

[1] In their spare time the Eskimo sometimes rested the lamps directly on two snow blocks and kept them lighted for a considerable time without other effort than the gradual melting of the snow.

I know of only one source for this material that is used at the present time by the Copper Eskimo, Port Epworth at the mouth of Tree River in Coronation Gulf where the talc chlorite schist occurs as an inclusion in the granite. It is very coarse in texture, and of a pale grey colour, as can be seen in unused specimens or by fracturing an old one.

Nevertheless, there seem once to have been other sources. An old woman who lived at the east end of Coronation Gulf told me that long ago her people used to make lamps and pots from stone obtained in a quarry on Rae River. An early explorer, John Rae, did find soapstone at the fall 10 miles from the mouth of this river,[1] but only in thin beds, which might explain why the Eskimo ceased to use this source. Then again, I purchased from a Coronation Gulf native a little toy lamp of typical Copper Eskimo shape (Figure 88), which was certainly not made from the Port Epworth soapstone, for it is much finer in texture and of a pale green colour. In the same region I obtained also an unfinished implement, resembling an imitation lance-head, which was made from a very similar soapstone, but is yellowish green. Finally, from the west coast of Hudson Bay, probably from Chesterfield Inlet, the museum has a toy lamp (IV.C.165) that resembles in colour, texture, and graining the green toy lamp bought in Coronation Gulf; in shape and dimensions the two are practically identical except that the Hudson Bay specimen has no shelf. Morley E. Wilson, of the Geological Survey, Canada, expressed the opinion that these lamps almost certainly came from the same quarry, because this type of soapstone is exceedingly rare in Canada, and that the implement like a lance-head was also derived from the same locality. It is worth noting that there are deposits of soapstone near the mouth of Back River.

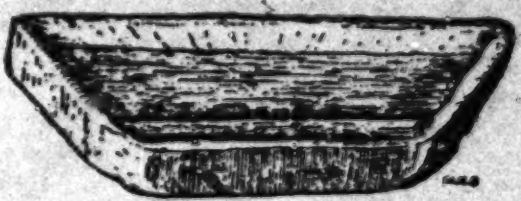

Figure 88. Toy lamp, of pale green soapstone. IV.D.612. 1/1.

Up to a few years ago natives from Dolphin and Union Strait in the west to Amundsen Gulf in the east often migrated to the Port Epworth quarry in the spring of the year in order to manufacture their own lamps and pots. Each family usually made more vessels than it required for its own use in order to have some for barter when it returned home the following autumn or winter.

Women and children often fashioned the smaller lamps and pots. The larger ones were the work of the men, although once they were finished and handed over to the housewife they became her exclusive property. No special skill was required; children 10 years of age could make small lamps just as good as those made by their elders. A little more care was necessary in working at a pot, because the rock, though soft, was somewhat brittle, and the walls and bottom had to be comparatively thin; but even this was not beyond the ability of a child, as it required patience rather than technical skill. With his crude copper tools a native could quarry out his block and make the largest lamp that was ever used in about 3 days, and the largest pot in no more than a day longer; iron tools, of course, appreciably lessened the time. First, he chiselled

[1] Richardson, Sir John: Journal of a Boat Voyage through Rupert's Land, vol. I, p. 312. London, 1851

15

324 316 412 461 354 clear of the solid rock a block equal to the length of the desired lamp or pot, then gradually hewed it into shape and smoothed it all over by rubbing it with any kind of hard, smooth stone. Formerly the copper-bladed ice chisel served for quarrying the block, and the copper-headed adze for shaping it, but in more recent times the Eskimo have used hatchets, geological hammers, and chisels with iron blades.

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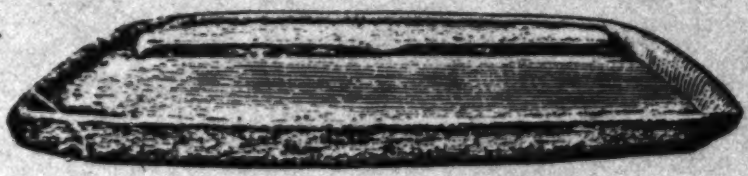

Figure 51. Typical Copper Eskimo lamp. IV.D.657. Approx. 1/6.

The typical Copper Eskimo lamp resembled in shape the lesser segment of a circle in which a large part of the arc was flattened until it was roughly parallel with the sector, whereas the sector itself was very slightly convex. Figure 51 illustrates this general shape. The convexity of the sector was occasionally very marked; and, conversely, the arc was sometimes hardly flattened at all, so that in a few specimens the shape approached an ellipse. The lamp outlined in Figure 52 shows a marked tendency in this direction.

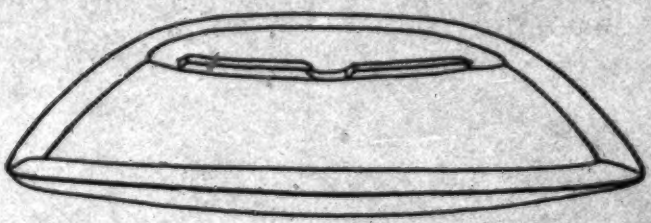

Figure 52. A nearly elliptical lamp. IV.D.631. Approx. 1/6.

The bottom of the lamp was invariably flat. The edges, which were perpendicular, or almost so, on the outside, ranged in thickness from 1½ inches to 3½ inches, and formed a narrow, well-defined rim around the oil well, which comprised the whole body of the lamp hollowed out to a depth of from 1 inch to 1½ inches. The front edge, or lip, sloped down to the well at an angle of around 45 degrees, but elsewhere the edges were practically as perpendicular inside as outside. The well of the lamp was flat like the bottom, not rounded like a saucer. Most lamps were divided into two compartments by a raised ridge parallel to the front and back edges, but very much nearer the back; and the level of the back compartment was nearly always above that of the front, or well proper, thus forming a kind of shelf from which the oil could flow forward through two gaps at the extremities of the dividing ridge, and, in most of the

One (Figure 56), 15 1/4 inches long by 8 1/2 inches wide, has been fashioned from a basic igneous rock that seems to be gabbro; the other (IV.D.69), 12 inches long by 7½ inches wide, from an impure red sandstone. These two lamps greatly resemble some from Hudson Bay, and probably came from that direction; for although the Victoria Islanders commonly obtained their lamps from Coronation Gulf, they sometimes travelled south by way of Bathurst Inlet and traded with Eskimo in the vicinity of Back River.

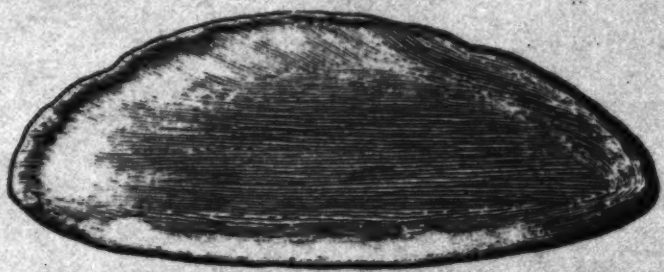

Figure 56. Lamp made from igneous rock. IV.D.67. 1/2.

In the snow-hut the lamp rested directly on two stout sticks laid parallel with one another behind the table. Care was taken to render it perfectly horizontal, or with a slight tilt forward, as a backward tilt prevented the oil from flowing to the wick. On one side both table and sticks were supported by an L-shaped board or strut (Figure 57) of which the long arm was driven into the snow wall near the door, and the short arm rested on the floor or was raised to the proper angle on a block of snow; on the other side, they were pushed into the side wall of the hut. Thus, both lamp and table paralleled the front edge of the sleeping platform, leaving a gap just wide enough for the housewife to slide into her seat.

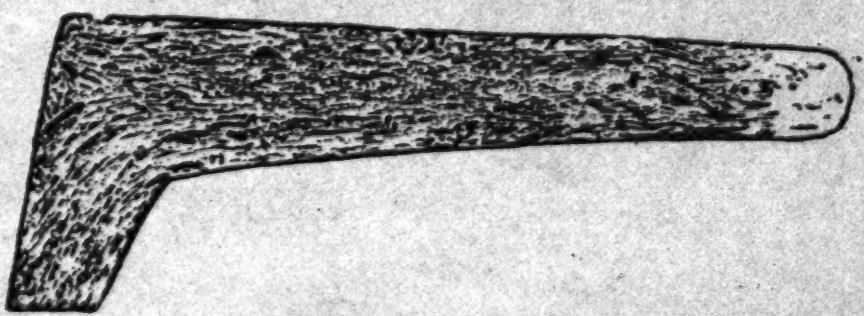

Figure 57. Strut for supporting table. IV.D.689. Approx. 1/12.

Occasionally a family lacked a proper strut to support the lamp and supplied its place with snow blocks. In the spring tent, too, the sticks and boards naturally rested on snow blocks because there was no snow wall to support them. In the late spring and throughout the summer, when most of the household furniture had been stored in caches and the Eskimo were moving over the land,

The lamp-trimmer mentioned several times above was in most cases merely a pencil of wood varying in length from 6 to 18 inches, generally flattened at one end and smoothed. Any small stick, whether of wood, bone, or antler, sufficed in an emergency; I have even seen a man use his knife. The stone (soapstone or asbestos) pencils, often employed in West Greenland and in Hudson Bay,[1] seem to have been unknown to the Copper Eskimo. Unknown, too, were the drip-stands of Alaska, Greenland, and other places. The Coronation Gulf soapstone is not porous as the Greenland soapstone is said to be[2]; and though oil might frequently drip over the edges, it never seeped through the vessel itself. 354 412 [135]

Every household employed torches for lighting extra lamps, for searching the corners of the hut, and particularly for conveying fire from one snow-hut to another. Occasionally a woman used the lamp-stick or even raw lamp-wick, but she always kept for the purpose four or five bunches of matted moss roots that she had collected and dried in the late summer (Figure 47b). Such a torch, dipped in the melted blubber, would burn several minutes, though if carried outside in windy weather it had to be shielded inside a bag or bucket. It was a common sight after a day's march to see the women carrying torches from one hut to another in order to relight their lamps; the first lamp, of course, was lighted with pyrites. 416 [824]

In summer, when the lamp was discarded, the Eskimo carefully extinguished their open-air fires with flat stones in order to reduce the burning wood to charcoal, which readily took a spark on some future occasion and could be kindled into a flame with the breath. In blowing the fire they did not purse their lips as we do, but curled the tongue along the lower palate into a half-cylinder that directed the breath along a narrow path. When carrying glowing coals from one tent or cooking place to another the women usually wrapped them in bunches of dry heather or *Dryas integrifolia;* where no coals were available they used the heather or dryas alone. 372 [824] [137]

POTS

The Back River Eskimo commonly made their cooking pot from five flat slabs of limestone cemented together.[3] Among the Copper Eskimo we saw none of this type, only pots carved from solid slabs of soapstone. Theoretically these pots should have received two forms, one adapted for cooking over the blubber lamp in winter and the other for use over an open fire during the summer months. The pot for use with the blubber lamp should have been a long, oblong vessel, rather narrow, because the flame of the lamp was a long, narrow line; it should have been comparatively deep to hold large pieces of seal and caribou meat; and it might have had considerable dimensions and weight, as it was always carried on the sled during the winter and spring months. The pot for use over an open fire in summer should have been less narrow, and altogether smaller and lighter, because at that season all the household furniture had to be carried on the back. 415 [171] [324] [252] [493] [482]

In actual fact both types existed among the Copper Eskimo, but the longer, narrower form adapted for use over the blubber lamp was far more generally used, as winter conditions prevailed during 8 months of the year. The pot was nearly always rectangular in outline, though one saw occasional specimens of trapezoid form. The corners were sharp, almost at right angles, the sides slightly convex in outline and sloping inward towards the bottom, making the vessel widest and longest at the top; the convexity in the sides was occasionally marked. In large pots there was a tendency for the depth to vary inversely with the breadth, so that the narrower vessels were likewise the deepest. 113

[1] Forsild, M.: Op. cit., p. [illegible]. Thalbitzer, W.: The Ammassalik Eskimo; Meddelelser om Grønland, vol. XXXIX, p. [illegible] (Copenhagen, [illegible]).
[2] Birket-Smith, K.: Ethnography of Egedesminde District; Meddelelser om Grønland, vol. LXVI, p. [illegible] (Copenhagen, [illegible]).
[3] Chief Factor James Anderson's Back River Journal of [illegible]; Can. Field-Nat., vol. LV, [illegible], p. [illegible].

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324

At each of the four upper corners a hole was drilled through the wall so that it issued about one-half inch below on the long side. The holes enabled the pot to be suspended by means of two loops of sealskin or plaited caribou sinew, one at each long end, from a horizontal rod; and the loops were adjusted to bring the bottom of the pot about one-half inch above the flame of the blubber lamp. In summer, when a pot was seldom or never suspended over an open fire, but rested on two or three stones, the loops were liable to hang down and be burned in the flames; accordingly, the housewife usually replaced them with two cords that ran diagonally between opposite corners, and allowed her also to raise the pot with one hand.

The wall of a pot often fractured at a corner hole, whereupon a second hole was drilled alongside the former one, in large vessels through the wall of the longer side, but in small ones occasionally through the end wall. Fractures in the body of the pot were mended with short bands of beaten copper as we mend china and porcelain, holes being drilled on each side of the fracture. The Copper Eskimo appeared to use no cement other than fat or grease to fill up the crack.

[414]
[381]

All pots, except the very smallest, had a low horizontal ridge carved across each short end about half-way down its outer face. Its original purpose, no doubt, was to facilitate the handling of the vessel, especially when mittens were worn, but in modern times it was largely ornamental, for it seldom projected more than about one-eighth inch and did not increase or decrease with the size of the vessel.

Pots varied in size from toys an inch or two long to vessels of 24 inches, capable of holding several quarts. An average vessel for use over a blubber lamp was about 18 inches long, 7 inches wide, and 4½ inches deep, with sides roughly ¼-inch thick. These were the dimensions at the top of the vessel; the bottom was about an inch shorter and half an inch narrower. Some of the larger pots in the possession of the National Museum of Canada have the following dimensions:

Catalogue number	Length	Breadth	Depth	Thickness
	Inches	Inches	Inches	Inches
IV.D.677	23¼	7¼	5	¼
IV.D.682	22	8¼	4¼	⅜
IV.D.668	22¼	6¼	6	⅜
IV.D.686	18¼	8¼	5	⅜
IV.D.1563	19	9	4¼	⅜

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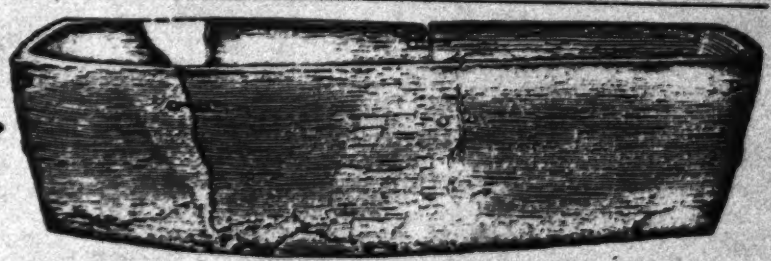

Figure 58. Sauyaktuk pot repaired with copper bands. IV.D.1563. Approx. 1/3.

Three pots are shown in Figures 58-60. No. IV.D.1563 (Figure 58), obtained from a Prince Albert Sound or Minto Inlet native, is unusually

interesting, because it has been broken across in two places and repaired with six copper bands. Moreover, unlike all the other pots from this region in the possession of the museum, it is made from a biotite chlorite schist. Yet in shape it is almost a duplicate of No. IV.D.676 (Figure 59), the sides in both pots being unusually convex. The latter vessel came from Coppermine River, and is of the usual soapstone (talc chlorite schist) from the quarry near Tree River.

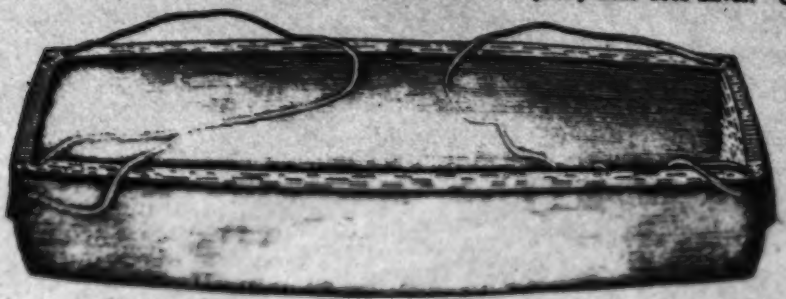

Figure 58. Typical soapstone pot. IV.D.678. Approx. 1/6.

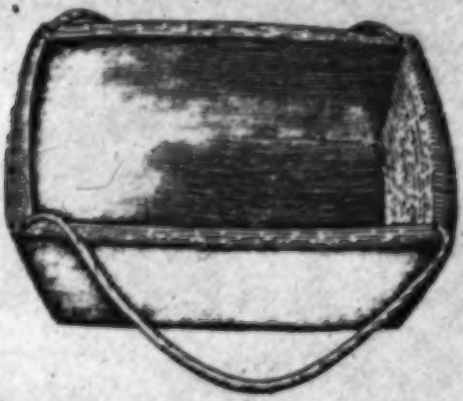

Figure 59. Squatish soapstone pot, now in Royal Ontario Museum, Toronto.

From an artistic point of view it would seem that the pots of the Copper Eskimo have degenerated during the last 150 years, for Hearne gives a slightly different description of the vessels he saw in the Eskimo encampment at Bloody Fall, near the mouth of Coppermine River. "Some of those kettles are so large as to be capable of containing five or six gallons; and though it is impossible these poor people can perform this arduous work with any other tools than harder stones, yet they are by far superior to any that I had ever seen in Hudson's Bay; every one of them being ornamented with neat mouldings round the rim, and some of the large ones with a kind of flute-work at each corner. In shape they were a long square, something wider at the top than bottom, like a knife-tray, and strong handles of the solid stone were left at each end to lift them up."[1]

[1] Hearne's Journey from Prince of Wales's Fort to Hudson's Bay to the Northern Ocean, edited by J. B. Tyrrell. The Champlain Society, Toronto, 1911, p. 106.

415 The flute-work in the corners and the strong handles of solid stone both
• 324 disappeared, though the latter survived among the Caribou Eskimo.[1] In order
531 perhaps to replace the handles, the neat ridges were lowered down the face of
178 the short ends, and they were dropped entirely from the longer sides. With regard to the flute-work in each corner one may perhaps conjecture that it was a rounded projection pierced with a suspension hole, as in the pots of West Greenland,[2] to avoid drilling through the actual wall. So far as I know no specimen exists of the type of pot seen by Hearne.

TABLE

352 The table, having no legs, was practicable only in a snow-hut where one end could be supported by the snow wall.[3] As soon as the snow melted, therefore, it was cached with the lamp at some convenient spot on land and abandoned until the early winter. In shape, it was roughly rectangular, with one end often a little wider than the other; and in size, it ranged from 3½ to 6½ feet long by 10 to 15 inches wide. An average specimen is shown in Figure 61.

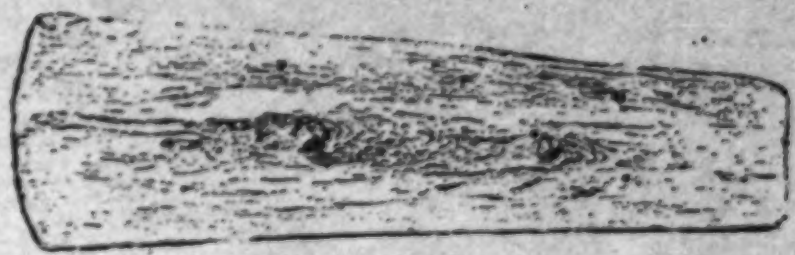

Figure 61. Table. IV.D.888. Approx. 1/12.

DRYING FRAME

417 The Copper Eskimo generally bestowed very little care on the making and handling of their drying frames, which, in consequence, were frequently broken and beat out of shape. Properly made specimens were never round, but roughly oval, the curve being flattened on the long side that fronted the sleeping platform. [414] Occasionally the two ends of the wooden hoop were merely lashed together; more often they were pegged with bone or copper pins. The frame was further strengthened by cross bars of sticks that passed at intervals of a few inches from one long side to the other and were lashed to the under edge of the frame exactly as the cross bars of a sled were lashed to the runners. Newly made [286] specimens, especially if large, had webbings of rawhide, but when the rawhide dried out and broke the owners often mended it with sinew. The thongs passed through holes (often sunken) in the frame, forming a warp and a weft that interlaced in what is known as cross-weft pattern, and gave square meshes from 2 to 4 inches across. A typical drying frame is shown in Figure 62. Simpson reported frames made of baleen on the south coast of Victoria Island near Wellington Bay,[4] but all that I observed were made of wood.

[113] [1] Birket-Smith, K.: The Caribou Eskimos. pt. 1, p. 181; Report of the Fifth Thule Expedition 1921-24, vol. V, Copenhagen, 1929.

[113] [2] Thalbitzer, W.: Ethnography and Archaeology of the North-East Greenlanders; Meddelelser om Grønland, vol. XLIV, p. 408.

[3] For the method of supporting the table, lamp, cooking pot, and drying frame see Report of the Canadian Arctic Expedition, vol. XII, pt. A, p. 61.

[113] [4] Simpson, Thomas: Narrative of the Discoveries on the North Coast of America, London, 1843, p. 166.

The method of using the whittling knife in Coronation Gulf and westward differed from the Greenland method described by Porsild.[1] The Copper Eskimo held the knife low down with the hand directed inward, and the handle resting along the inner side of the forearm so that it fitted into the curve of the elbow. With the instrument thus pivoted on the elbow the forearm moved as one unit and the wrist remained perfectly still. Smaller whittling knives, even though their handles did not reach the elbow, were held in the same manner.

Grooving Tool. The Copper Eskimo had a tool for cutting grooves in bone, antler, and horn similar in shape to the tool used by other Eskimo tribes. The blade, which was nicked at the end or else bore a sharp, pointed projection, was mounted in an antler handle of no particular shape. Sometimes the handle was split for the insertion of the blade, sometimes the blade was simply driven in with a stone, and riveted or not according to the owner's fancy. Figure 115 shows three specimens of the tool, all from Coronation Gulf; but Figure 115c is really a combination tool, because its handle served also as an arrow straightener. All three specimens have iron blades, as indeed did every grooving tool I saw in the country. Whether copper or stone preceded iron in this case I did not discover.

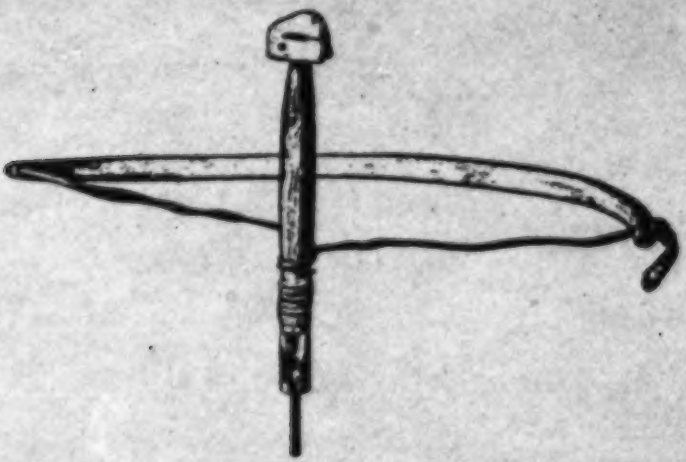

Figure 116. Drilling set. IV.D.704. 1/2.

Drilling Sets. The Copper Eskimo used the three-piece drilling set found among other Eskimo tribes (Figure 116). The bow was of bone, generally the rib of a musk-ox or caribou; a hole was drilled in each end for the attachment of the sealskin cord. The stem or spindle was nearly always of wood, though bone was used occasionally and ivory when it was procurable. To prevent the wood from splitting, a bead of bone, antler, or musk-ox horn was added to it, either as a cap or by splicing. All the drills I saw had points of iron, which had long been current in very small quantities; copper perhaps was used earlier, and stone, although the natives seemed to have no recollection of the stone drill points.

[1] Porsild, M. P.: Studies on the Material Culture of the Eskimo in West Greenland. Meddelelser om Grønland, vol. 51, p. 166.

412 321 325 [320] The most common mouthpiece was the astragalus of the caribou, though any piece of bone or antler, and even soapstone (Figure 117), might be shaped to serve the same purpose. When a man lacked a mouthpiece he often used the handle of his whittling knife or some other implement. The astragalus has a natural cavity of convenient size, but the rim is low on one side and the end of the spindle liable to slip out; consequently, a bone or metal peg was often inserted to raise the level of the rim in this place (Figure 118). Sometimes a small plate of copper or iron was driven into the bottom of the cavity through one side to give a hard, smooth base for the rotating spindle. The latter feature may be of modern origin, but I am inclined to favour its antiquity on account of the number of specimens in which it is found, and the analogous stone sockets in other regions.

412 329

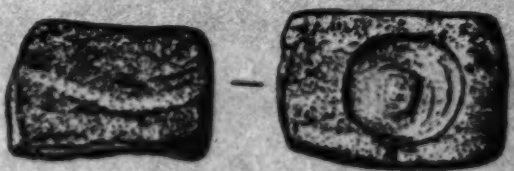

Figure 117. Mouthpiece for drill, of soapstone. IV.D.1672. 2/3.

412 321

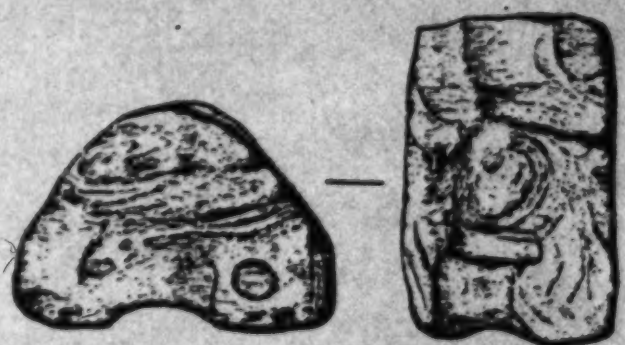

Figure 118. Mouthpiece for drill, made from caribou astragalus. IV.D.294. 2/3.

412 325 322 *Adzes.* Hearne gives the following description of Copper Eskimo adzes. "Their hatchets are made of a thick lump of copper, about five or six inches long, and from one and a half to two inches square; they are bevelled away at one end like a mortice-chisel. This is lashed into the end of a piece of wood about twelve or fourteen inches long, in such a manner as to act like an adze: in general, they are applied to the wood like a chisel, and driven in with a heavy club, instead of a mallet. Neither the weight of the tool nor the sharpness of the metal will admit of their being handled either as adze or axe, with any degree of success".[1]

[1] Hearne's Journey from Prince of Wales's Fort in Hudson's Bay to the Northern Ocean, edited by J. B. Tyrrell. The Champlain Society, Toronto, 1911, p. 121. [114]

per, or iron. They claimed that their forefathers had never used points of stone and ascribed such specimens as they picked up in their country. (See Figure 155) to a still earlier people. Thus, it would seem that in the short space of 100 years stone points had passed out of both use and memory. 411 324 [174]

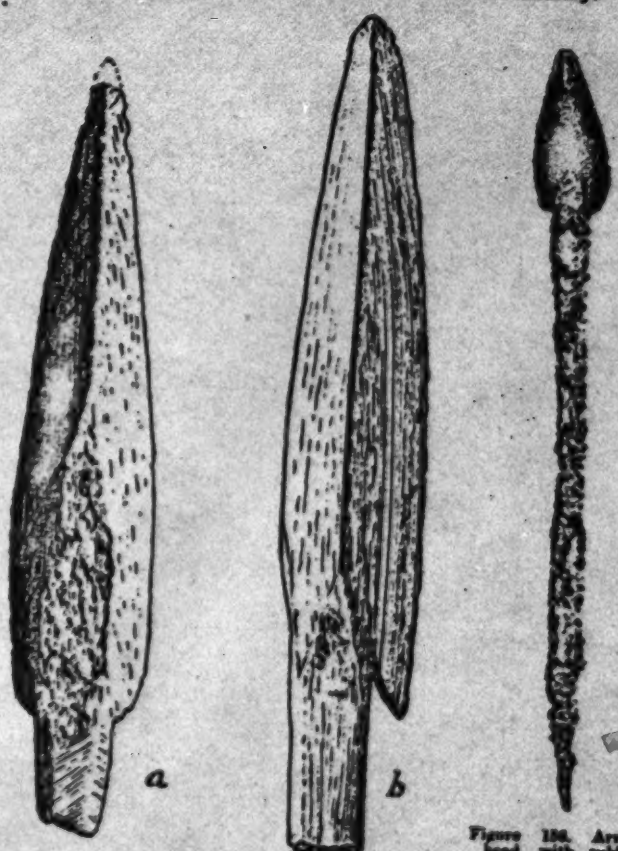

Figure 155. Two rubbed stone points picked up on the surface of the ground in Coronation Gulf. IV.D.607. 1027. 1/1.

Figure 156. Arrow head, with rubbed slate point, found on Victoria Island. IV.D.1819. Approx. 1/2.

[321] [172]

In 1929, Mr. Lincoln Washburn presented to the National Museum of Canada two old slate-pointed arrow heads that had been picked up on Victoria Island.[1] The points were wedged without rivets into rather flat antler foreshafts, one being at right angles to the axis of the shaft, the other parallel with it. Each shaft bore a single barb and terminated in a sharp tang that seemed to lack knobs, but one shaft had been made from two pieces of antler deftly 411 324 321 172

[1] He added the information that near Holman Island, at the entrance to Prince Albert Sound, is an outcrop of a [illegible] rock that the native [illegible] was once used for arrow points and knife blades. [316]

411 scarfed and spliced together with three copper rivets (Figure 156). Both were
324 deeply encrusted with lichens, and were evidently of considerable antiquity.
321 Probably they were made by ancestors of the present-day Copper Eskimo. On
172 the other hand, it is not at all impossible that they are arrow heads of the earlier "Thule"-culture inhabitants who have left other remains in the region. The use of copper rivets does not rule out this possibility, because copper-bladed women's knives with typical "Thule" handles have been recovered from an old stone house on Victoria Island and from a stone grave on the neighbouring Read Island, along with harpoon heads and other objects of typical Thule (North Alaskan) types. There are good grounds for believing, therefore, that
[325] the ancient Thule population itself used the local deposits of copper and passed
[174] on its knowledge to the ancestors of the present-day Copper Eskimo when the latter migrated into the area.[1]

411 In 1914 arrows with long antler points that fitted directly into the wooden
321 shafts were fairly common; some had no barbs, others one or more along one
325 side. Much more common, however, were arrows with separate blades of bone, copper, or iron that riveted into antler foreshafts, or were provided with long shanks that took the place of foreshafts. Points of bone were rare; about 65 per cent were of copper and the remainder of iron, hammered into the same shapes as the copper ones. These shapes, and also the methods of splicing the wooden shafts when made of two or more pieces, have been rather fully illustrated by Stefansson.[2] Individuals may have preferred one type of point to another for certain game, but so far as I could discover they used all types more or less indiscriminately.

411 The Copper Eskimo used the Mediterranean release, holding the bow
237 almost horizontal. They generally feathered their arrows with goose, loon, eider duck, or snowy owl quills, but did not disdain quills from other birds. Normally, two feathers only were used on each arrow, but occasionally three, for no special reason that I could discover. The hunter cut off on his trimming board all the barbs along one side of the feather, smoothed the rough quill with his knife, grooved the arrow shaft with the special tool for that purpose (or, if he lacked this tool, split it slightly with his knife), and lashed the two ends of the feather in the grooves with caribou sinew. This was the usual way of feathering. Occasionally, however, he merely trimmed the barbs a little on both sides and fastened the feather flat against the shaft. There was also a third method, in which two half feathers, i.e., feathers from which the barbs on one side had been removed, were lashed around the end of the shaft spirally, end to end, and the barbs spread fanwise. I saw a man feather an arrow for his young stepson in this way and was told that it was a rare method, never employed on arrows intended for serious use.

Bow-case, Quiver, and Tool Bag

411 The bow-case (Figure 157), which was made of sealskin to keep out water,
415 was shaped to the form of the weapon; one end was closed, the other left open
281 for some distance down its curved edge to permit the insertion of the bow. To close the opening when the bow was in place there was a short cord of plaited sinew whose loose end was tucked under the lashing, leaving the tip protruding so that it could be unfastened at a single jerk. A quiver with or without a cap was sewn or buttoned to the straight edge of the case; and a tool bag was also sewn to the case in such a way that the quiver, when carried on the back, lay on top of it and prevented its contents from falling out. Often, too, there was a sheath

[TEXT CONTINUED ON PAGE 128]

[1] Mathiassen found a little copper in the old Thule site at Nuyum, on the westbrook of Hudson Bay (Reports of the Fifth Thule Expedition, vol. IV, pt. 1, pp. 14, 16 (Copenhagen, [illegible])); and Graham Rowley discovered a small copper hook in a Dorset culture site near Inlukik, some [illegible] miles farther north. So far as we know today, this copper could have come only from the Coronation Gulf region.

[113] [2] Stefansson, V.: Anth. Papers, Am. Mus. Nat. Hist., vol. XIV, figs. [illegible] ([illegible]).